

Supplementary Materials

Identification of Terpene Compositions in the Leaves and Inflorescences of Cybrid *Cannabis* Species Using Headspace-Gas Chromatography/Mass Spectrometry

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Figure S1. Total ion chromatograms of terpenes in leaves of Victory at different incubation temperature of (a) 60°C, (b) 80°C, (c) 100°C, and (d) 120°C.

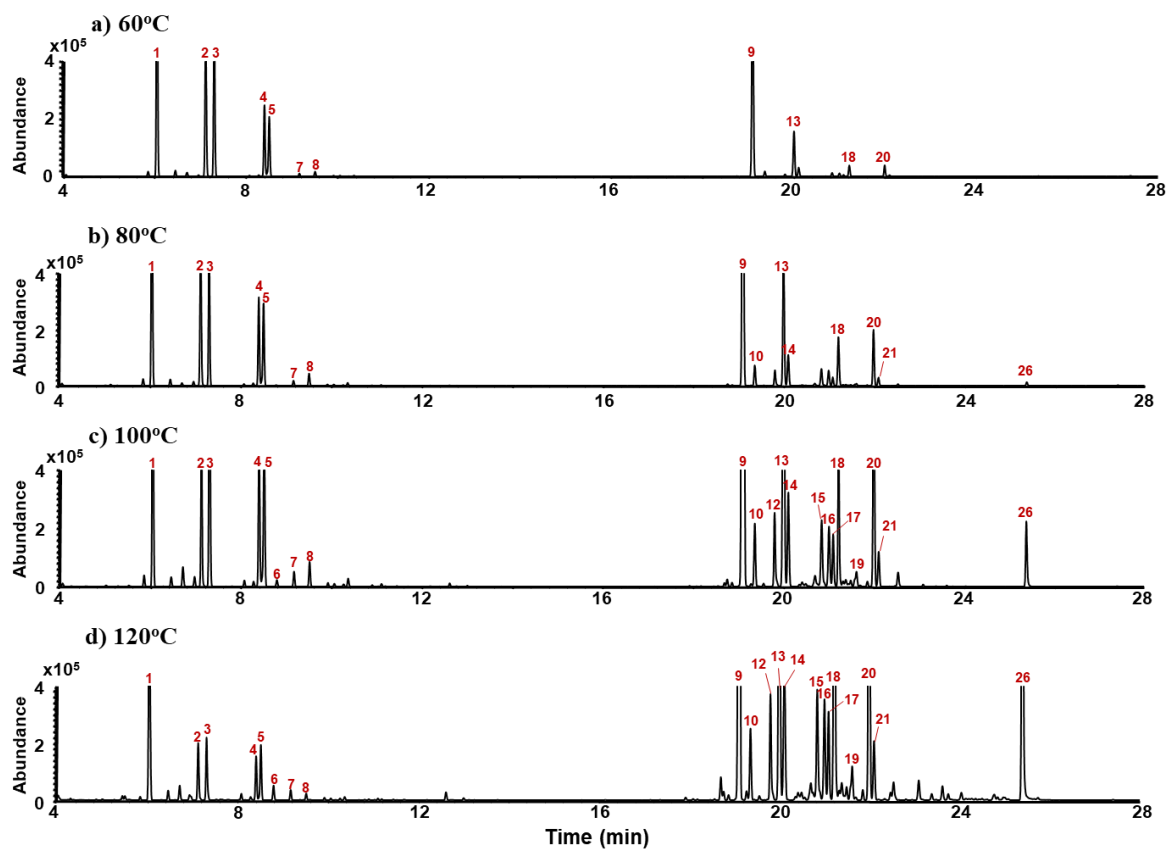


Figure S2. Cluster dendrogram of leaves and inflorescences of hybrid *Cannabis* using relative abundances of peak areas for 26 terpenes.

Numbers were identified as follows: 1. Cherry Blossom leaf, 2. V1 leaf, 3. V4 leaf, 4. White Widow leaf, 5. Chung Sam leaf, 6. Blue Dream leaf, 7. Bubble Gum leaf, 8. Purple leaf, 9. Victory leaf, 10. Cherry Blossom inflorescence, 11. V1 inflorescence, 12. V4 inflorescence, 13. White Widow inflorescence, 14. Chung Sam inflorescence, 15. Blue Dream inflorescence, 16. Bubble Gum inflorescence.

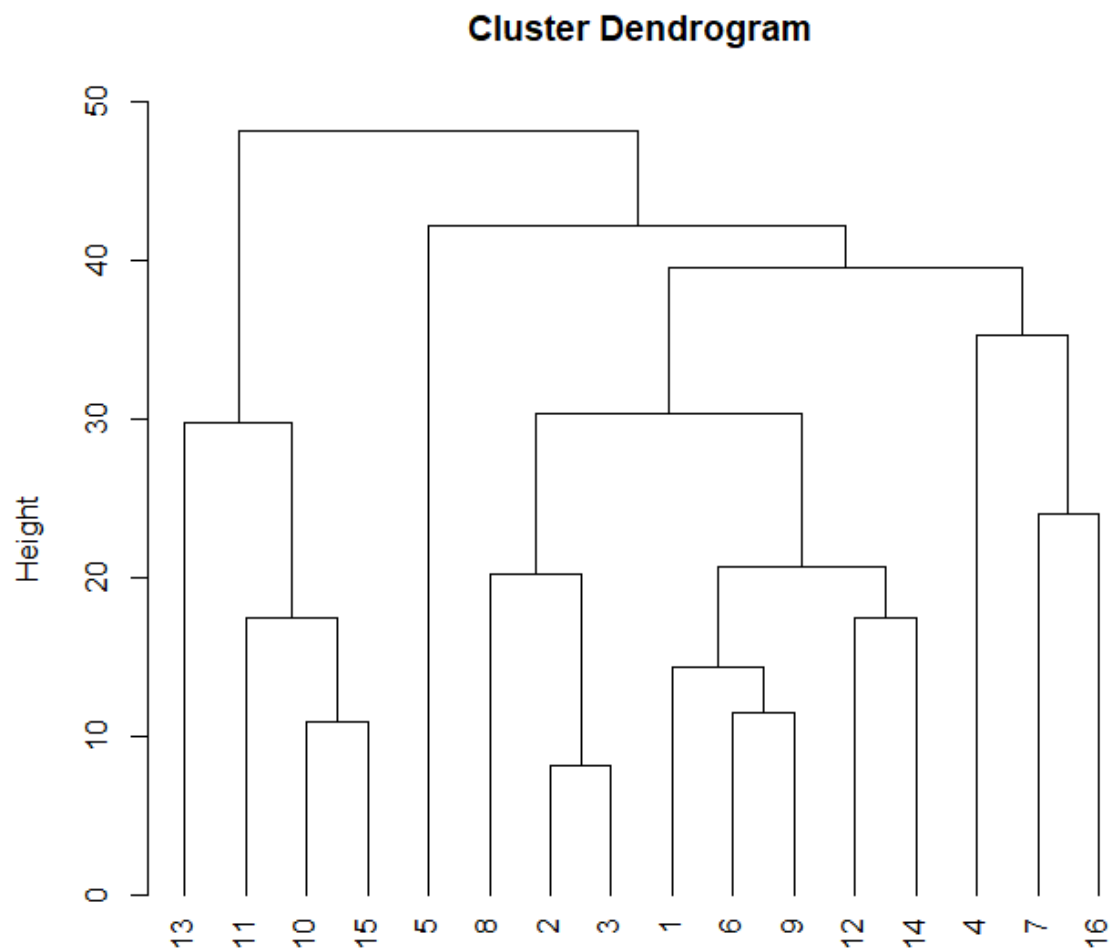


Table S1. Analytical characteristics of the HS-GC/MS method for 6 major terpenes.

Terpenes	Extract ion (m/z)	LOQ (ng/mL)	Linearity		Precision		Accuracy		
			Range (µg/mL)	r ²	Intra-day (%)	Inter-day (%)	5 µg/mL (%)	10 µg/mL (%)	20 µg/mL (%)
α-Pinene	93	10	1 - 250	0.9954	3.02±0.91	6.48±1.21	102.01±0.533	103.41±2.212	98.98±2.534
β-Pinene	93	10	1-250	0.9956	3.97±1.021	5.78±0.854	100.74±2.95	101.52±1.51	104.92±1.36
Myrcene	93	100	1 – 500	0.9986	4.47±1.59	6.55±1.64	82.66±0.62	92.25±2.705	96.00±1.521
Limonene	68	10	1-250	0.9976	2.23±0.49	4.48±1.42	102.10±2.47	102.39±2.16	103.84±2.96
β-Caryophyllene	93	10	1 – 250	0.9976	8.01±1.40	10.19±1.06	108.66±2.86	111.56±12.054	108.75±3.15
α-Humulene	93	10	1 - 250	0.9961	2.90±0.89	3.29±1.13	86.31±1.774	94.87±2.82	104.10±8.297

All precision and accuracy data were obtained by analysis in triplicate.